

DETAILED ACTION

This communication is in response to applicant's Amendment which is filed August 17, 2011.

An amendment to the claims 1 and 18 has been entered and made of record in the application of Pitt-Pladdy for a "RFID apparatus" filed October 29, 2004.

A new claim 19 is introduced.

Claims 1-19 are now pending in the application.

Response to Arguments

In view of applicant's amendment to amend the claims 1 and 18 to obviate the 35 U.S.C. §112 second paragraph rejections, therefore, examiner has withdrawn the rejection under 35 U.S.C §112, second paragraph.

Applicant's arguments with respect to claims 1-19, filed August 17, 2011, have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 2-8 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said incoming RF signal" in line 2. There is insufficient antecedent basis for this limitation in the claim. "said incoming RF signal" should be "said incoming fourth RF signal".

Claim 7 recites the limitation "said generated RF signal" in line 2. There is insufficient antecedent basis for this limitation in the claim. "said generated RF signal" should be "said third RF signal".

Claims 8 and 13 recites the limitation "an RF signal" in line 3, "a modulated RF signal" in line 4, "generate an RF signal" in line 5 and "an incoming RF signal" in line 6. There is insufficient antecedent basis for this limitation in the claim. "RF signal" should be "said first RF signal", "a modulated RF signal" should be "said second RF signal", "generate an RF signal" should be "generate said third RF signal", and "an incoming RF signal" should be "said fourth RF signal".

Claim 7 recites the limitation "an antenna" in line 2. There is insufficient antecedent basis for this limitation in the claim. "an antenna" should be "the antenna".

Referring to claims 3-6 are rejected as being dependent upon a rejected Claim 2 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al. (US# 6,892,052) in view of Perttola et al. (US# 7,274,909).

Referring to claims 1 and 18, Kotola et al. disclose a mobile terminal (102) with an antenna (129) includes a terminal RFID reader module (220) and a RFID tag (215) (i.e. a RFID apparatus) comprising:

A terminal RFID reader module (220) with the antenna (219) (i.e. a transmitter) connects to a CPU (208) operative to transmit an interrogation signal (i.e. an RF signal) to another terminal (column 7 line 66 to column 8 line 12; see Figure 4); and operative to receive a Bluetooth serial number and possible other information (i.e. a second RF signal) of other terminals (i.e. an external tag device) (column 7 line 66 to column 8 line 12; see Figures 4 and 7); and

a RFID passive tag (215) includes an analog circuit (223) for converting the received RF signal (i.e. a fourth RF signal) into digital signals for processing by the digital circuitry (225)

depend upon characteristic of the incoming fourth RF signal received from an access point (110) (i.e. an external reader device) (column 7 lines 55 to 65; see Figures 3A and 4 to 8).

However, Kotola et al. did not explicitly disclose transmit the generated third RF signal using the antenna to the external reader device.

In the same field of endeavor of a dual mode RFID system, Perttila et al. teach a mobile terminal (100) receives identifier and content data from a transponder (102) using the transceiver (930) via the antenna (934) and communicate with the operator network (212) bidirectional using the same antenna (934) (column 19 lines 50 to 60; see Figure 2 and 9) in order to select one or more of the stored data items in the RFID tag according to one or more criteria.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the mobile terminal communicates with the operator network using the same antenna that communicate with the RFID tag taught by Perttila et al. in the dual mode RFID based wireless terminal includes a terminal RFID reader module and the RFID tag of Kotola et al. because using the mobile terminal communicates with the operator network using the same antenna would provide a RFID system with practical and possible to share the same transceiver in the mobile terminal.

Referring to Claims 8-12, Kotola et al. in view of Perttila et al. disclose the RFID apparatus according to claim 1, Kotola et al. disclose the mobile terminal (102) includes the terminal RFID reader module (220) and a RFID tag (215) (i.e. a RFID apparatus), the mobile terminal (102) has a first mode of operation and a second mode of operation, wherein the apparatus (102) is arranged such that: during said first mode, the apparatus (102) can transmit the

interrogation signal (i.e. an RF signal) to the other terminals (i.e. a first external device) and can receive information (i.e. a modulated RF signal) from the other terminals (i.e. said first external device) (column 7 lines 66 to column 8 line 12); and during said second mode, the apparatus (102) can generate a digital signal (i.e. an RF signal) dependent upon the RF signal (i.e. an incoming RF signal) received from the access point RFID reader module (i.e. a second external device), and transmit said generated RF signal to said the access point RFID reader module (i.e. the second external device) (column 7 lines 55 to 65; see Figures 3, 3A and 4-7).

Referring to Claims 13-14, Kotola et al. in view of Perttola et al. disclose the RFID apparatus according to claim 1, Perttola et al. disclose wherein said apparatus comprises an antenna used commonly to both receive said modulated RF signal and to transmit said generated RF signal (column 19 lines 52 to 60; see Figure 9).

Referring to Claim 15, Kotola et al. in view of Perttola et al. disclose the RFID apparatus according to claim 1, Perttola et al. disclose wherein said apparatus comprises a transceiver (932 or 832) (i.e. a modulator) operative to modulate a carrier signal (column 19 lines 41 to 56; see Figure 9).

Referring to Claims 16-17, Kotola et al. in view of Perttola et al. disclose the RFID apparatus according to claim 1, Kotola et al. disclose a mobile terminal (102) incorporating an RFID apparatus according to claim 1 (column 3 lines 24 to 42; column 4 lines 38 to 46; see Figure 1).

3. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al. (US# 6,892,052) in view of Perttola et al. (US# 7,274,909) as applied to claim 1 and further in view of Corrigan, III et al. (US# 6,697,345).

Referring to claims 2-6, Kotola et al. in view of Perttola et al. disclose the RFID apparatus according to claim 1, however, Kotola et al. in view of Perttola et al. did not explicitly disclose wherein said generator comprises a phase locked loop; wherein the phase locked loop is a second order loop.

In the same field of endeavor of a dual mode radio communication system, Corrigan, III et al. teach that a second order phase lock loop (1014) (column 26 lines 33 to 55; see Figure 10) in order to slows down the filtering needed to accurately recover the timing in the discontinuous measurements.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the second order phase lock loop filter with a voltage control oscillator to stable clock source taught by Corrigan, III et al. in the dual mode RFID based wireless terminal of Kotola et al. in view of Perttola because using the second order phase lock loop filter with a voltage control oscillator would provide a RFID system with a stable clock source to transmit generated RF signal to the tag or other reader.

4. Claims 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotola et al. (US# 6,892,052) in view of Perttila et al. (US# 7,274,909) as applied to claim 1 and further in view of Shober et al. (US# 5,649,295).

Referring to claim 7, Kotola et al. in view of Perttila et al. disclose the RFID apparatus according to claim 1, however, Kotola et al. in view of Perttila et al. did not explicitly disclose wherein said apparatus is arranged to modulate said generated RF signal prior to transmission of said RF signal.

In the same field of endeavor of a radio frequency identification system, Shober et al. disclose wherein said interrogator (103) (i.e. said apparatus) is arranged to modulate said generated RF signal prior to transmission of said generated RF signal (column 3 lines 27 to 34; see Figures 1 and 2) in order to have an inexpensive circuit.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the modulated RF signal prior to transmission taught by Shober et al. in the dual mode RFID based wireless terminal of Kotola et al. in view of Perttila because using the modulated RF signal prior to transmission would provide a RFID system with an inexpensive circuit.

Referring to claim 19, Kotola et al. in view of Perttila et al. disclose the RFID apparatus according to claim 1, Shober et al. disclose wherein the generated third RF signal interferes with the incoming fourth RF signal (column 7 lines 5 to 15).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the

organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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